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ABSTRACT

As part of an ongoing effort to understand the nature of student performance and persistence at Southwestern College (SC), a study was conducted in fall 1976 to determine the effect of reading ability on student course performance. An analysis of the Nelson-Denny Reading Test (NDRT) scores of 4,610 students revealed that, on an average, students scored at the 13th grade level, though 23% had reading scores at or below the 9th grade level. When reading levels were compared with course completion rates and grade point averages, it was shown that student performance was related to reading ability in 80% of SC's academic departments, and that reading ability was especially critical in Behavioral Science, Business, English, Life Science, Mathematics, Paramedical Studies, and Social Science departments. Student performance was affected by reading ability in 93% of all subject areas and in 45% of all courses. Based on study findings, the implementation of a Course Reading Index Prerequisite System was recommended, which would limit course enrollment to students reading above a specified level. The study report contains an analysis of the likely effects of the proposed Prerequisite System; and information related to SC's Predictability Counseling program, which provides students and counselors with information on probable success for various student objective categories and majors, and on chances for success in specific courses based on NDRT scores. (DAB)

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SOUTHWESTERN COLLEGE

FACULTY BULLETIN - INFORMATION

Volume 17 - Number 25
September 6, 1977

SUBJECT: READING STUDY: FINDINGS, RECOMMENDATIONS, AND IMPLICATIONS

BY: Dr. Allan MacDougall

For sometime now, the Research Office has been conducting a series of studies concerning student performance and persistence patterns. The attached study discusses the effect of reading on student performance in courses. Dr. MacDougall conducted the research for this study, while Mr. Wraith and Dr. Singer are responsible for the recommendations and the implications which follow from the recommendations.

This study is being distributed at the same time to all members of the faculty, student leaders, and the Governing Board. Mr. Wraith and Dr. Singer will be presenting this study for information only to the Governing Board at the September 8 meeting.

It is hoped that this study will lead to a campus-wide discussion during this school year in various forums, including the Curriculum & Instruction Committee, on the findings and recommendations made herein.

APPROVED:

Donald L. Singer
Vice President for Academic Affairs

DLS:gs:vh

JC 830 179

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TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

INTRODUCTION - BACKGROUND

This study has been conducted as part of an ongoing effort to understand the nature of student performance and persistence patterns at Southwestern College. Concern over these matters has recently intensified based on a number of factors:

1. The statewide study conducted for the Postsecondary Education Commission by Dorothy Knoell.
2. The concern expressed by statewide faculty senate and echoed by Southwestern's Faculty Senate Chairperson over academic standards.
3. The recent study showing that Southwestern College transfer students have a lower GPA at San Diego State than transfers from other Community Colleges.

Studies previously conducted at Southwestern at the direction of the Board of Trustees have shown that differences in student performance and persistence patterns are related to both institutional and student factors. The student factors most critical to success or failure are:

1. Motivational Factors (Goals and Objectives).
2. Socio-economic Factors (Family Income, Ethnic, Financial Aids, etc).
3. Skill Factors (Reading, Writing, Mathematics Abilities).

These factors are interrelated in explaining academic acheivement. This study to date had shown that motivational and socio-economic factors are related more strongly to dropout rates (where a student completely leaves school) and skill factors are more strongly associated with class persistence and performance ("W" & "NCR" rates and grades in individual courses.)

READING AS A BASIC SKILL

This study focuses on the effect of reading on student performance in courses. While there are a number of learning skills and many ways in which students may process information there can be little doubt as to the importance of reading as a basic method for acquiring knowledge in the existing academic environment.

Colleges have not traditionally not placed an emphasis on the teaching of reading skills. It has generally been assumed that students entering college can read at a level required to acquire knowledge in the more specialized disciplines. College English departments have primarily concerned themselves with the development of the writing skills. A prerequisite to successful writing has been an understanding of grammar. At Southwestern as elsewhere, a grammar placement test is given to place students in English writing classes. Writing skills are used primarily to demonstrate knowledge. Reading skills however are used more often to acquire knowledge. This explains the fact that a timed reading test is a better predictor of performance across the various disciplines in the curriculum than the grammar test.

The increased use of the multiple choice and true false tests and the relative demise of the essay or "Blue Book" test also explains why reading skill has become even more important as a predictor of success or failure. In a typical lecture class the student's grade is determined by his performance on a number of multiple choice or true false tests which are often at least partially based on concurrent reading in a text. Before a student can answer a question successfully (unless he is a good guesser) he must read and understand the words in the question before he can demonstrate the specialized knowledge he is learning in that discipline. Multiple choice and true false tests (the basis for many grades) are fundamentally reading tests.

THE READING TEST AT SOUTHWESTERN COLLEGE

The guidance placement test is required for all day students taking more than six units or taking a Math or English composition class at the college. This test includes an English grammar, mathematics, and reading test. The Nelson-Denny reading test is a nationally normed test designed to measure reading ability for Junior High School and College grade level students. Raw scores, percentages, and reading grade equivalents are elicited for reading vocabulary, reading comprehension, reading rate and total reading for each student taking the test. The test has been vallidated in numerous studies and has shown significant correlations with high school and college grades, class ranks, and subject matter grades.

In the Fall of 1976, scores were available on 4610 students at Southwestern. This study is based on the performance of these 4610 students.

Sixty Seven percent of the day students had reading test scores reported.

The distribution of the total reading scores by grade level for day students is shown in table I below.

TABLE I

Reading Scores of Southwestern

College Day Students: Fall 1976

Reading Grade Level	# of SWC Students	% of SWC Day Students With Reading Scores
Less Than 6	137	3%
6-6.9	131	3%
7-7.9	161	4%
8-8.9	256	6%
9-9.9	265	7%
10-10.9	335	8%
11-11.9	265	7%
12-12.9	489	12%
13-13.9	759	18%
14-14.9	560	14%
15+	743	18%

The average total reading raw score for day students in Fall 1976 was 68 or equal to the 13th grade level. The table above shows that 50% (2039) of Southwestern College day students have reading scores below the 13th grade level and 23% (950) of the students have reading scores at or below the 9th grade level. If those not taking the reading test were assumed to have a distribution of scores like those who did, 5900 students would score below the 13th grade level and 2700 students would score below the 9th grade level.

READING AND PERFORMANCE

Reading scores by themselves have very little value. It is the relationship between these scores and student performance that makes them meaningful. To determine whether performance in a course was reading related or not the performance was listed for each course by grade level in ascending order. The number successfully completing and the GPA for all students at each grade level was calculated. Successful completion is defined as reciving an A, B, C, or CR grade in the course. All departments, subject areas and courses with 30 or more students were analyzed in this way. If differences of more than 20% in the successful completion rate were noted between the lowest reading level and the highest level and if there was a differential of at least .75 in the grade average the subject was designated as "Reading Related at a Performance Level." This means that students who read better perform significantly better in the class. In addition, if a point was found at which less than 50% of the students successfully completed, the subject was designated as "Reading Related at a Survival Level." If no relationship was noted the subject was designated "Not Reading Related."

DEPARTMENTS

The following shows the relationship between reading and overall performance in departments. The reading indexes are shown in parentheses.

Not Reading Related	Reading Related at Performance Level *	Reading Related at a Survival Level
Foreign Language	Human Services (150)	Behavioral Science (183)
Physical Education	Physical Science (150)	Business (150)
Visual Arts	Performing Arts (150)	English (150)
	Speech (134)	Life Science (217)
	Technology (150)	Math (150)
		Paramedical (150)
		Social Science (134)

The performance of students in 12 of the 15 academic departments (80%) is reading related. Reading is related to student survival in 7 of these 12 departments.

SUBJECT AREAS

The grouping of performance by department is much too broad to be of specific value in understanding the nature of the reading/curriculum relationship. The study was therefore expanded to subject areas. Performance was grouped and examined within 68 subject matter areas with the following results.

Not Reading Related 5 Subjects (7%)	Reading Related at a Performance Level 15 Subjects (22%) *	
Art (Activity)	Airline Services (150)	Home Economics (134)
Education Assistant	Agriculture (117)	Inter-collegiate Athletics (117)
PE (Activity)	Architecture (117)	Music (Performance) (150)
Philipino	Automotives (150)	Theater (Performance) (134)
Spanish	Child Development (150)	Political Science (167)
	Chemistry (183)	Speech (134)
	Electronics (167)	Recreation Leadership (150)
	French (150)	

Reading Related At a Survival Level 48 Subjects 71%

(See Table II For The Distribution of Subject Areas by Reading Level)

* The index levels shown for performance related departments is where the index level at which the greatest relative gain in successful completion is acheived.

TABLE II — SUBJECT AREAS/READING INDEX MATRIX

Students with reading indexes below these levels for the subject areas listed have less than a 50% chance of success in that subject area based on the actual experience of students in Fall 1976.

Reading Index	117	134	150	167	183	200	217	234
BEHAVIORAL SCIENCE		Psychology		Geography	Anthropology	Sociology		
BUSINESS		Bus. Admin. Economics	Marketing Real Estate Secretarial Science			Data Processing	Accounting	
ENGLISH			Learning Skills Composition		Grammar	Journalism	Literature/ Humanities	
FOREIGN LANGUAGE	Italian							German
HUMAN SERVICES		Bilingual Systems Administration of Justice						
LIFE SCIENCE						Zoology	Biology	Botany
MATH			Mathematics					
PARAMEDICAL			Vocational Nursing	Nurses Aid Registered Nursing				
PERFORMING ARTS			Theater Survey			Musicianship		
PHYSICAL EDUCATION		P.E. (Theory)		Health Education				
PHYSICAL SCIENCE	Engineering Physics		Astronomy		Geology	Physical Science		
SOCIAL SCIENCE		Mexican American Studies	Black Studies	Political Science		History	Philosophy	
SPEECH ARTS								
TECHNOLOGY	Construction Technology			Aeronautics				
VISUAL ARTS		Photography		Art Theory/ Concepts		Art Appreciation	Interior Design	

COURSES

One significant feature shown in the study to this point is the differences in the reading levels between segments of the curriculum required to produce the same levels of student performance. This fact requires that for more precision we examine performance at the course level. There were 1102 credit courses listed in the 1976-77 catalog, 633 (57%) of these were actively offered in Fall 1976. The course breakdown is shown in tables III and IV.

TABLE III

Number and Percent of Survival Reading Related Courses by Size

Total Number Enrolled In Course	Not Reading Related & Performance Related		"Survival Reading Related"		Total
	#	%	#	%	
200+	11	29%	27	71%	38
100-199	23	43%	31	57%	54
50-99	58	56%	46	44%	104
30-49	83	68%	39	32%	
Subtotal	175	55%	143	45%	318
Less Than 30	NA	NA	NA	NA	315
Total					633

Courses smaller than 30 students were not analyzed for reading relatedness due to the vary small number of reading scores at each reading index level. A more valid index can be derived from the subject area matrix (Table II). For these smaller courses, time limitations precluded making "Performance" level reading related breakdown on a course by course basis. Table IV shows reading indexes for courses at which less than half the students successfully completed the course.

TABLE III -- COURSE/READING INDEX MATRIX

Students with reading indexes below these levels for the courses listed have less than a 50% chance of success in the course based on the actual experience of students in Fall '76.

Reading Index	117	134	150	167	183	200	217	234	250
BEHAVIORAL SCIENCE	Psyc 1		Anth 3	Anth 1	Psyc 3 Psyc 70 Soc 9	Soc 1 Soc 10	Anth 2 Geog 1		
BUSINESS	Bus 50	Bus 54 Econ 1A	Bus 43 Bus 46 Bus 61 Bus 71 Bus 75A/B Bus 90 Econ 1B	Bus 53 DP 30	Bus 41 Bus 83 Bus 51 Bus 80	Bus 1B Bus 30A Bus 66 Bus 58 Bus 82	Bus 1A Bus 3 Bus 7 Bus 10 Bus 74 DP 1 RE 7	Bus 52	
ENGLISH	Eng 3		Eng E	Eng 5	Eng D Eng 4	Eng 51A			Eng 6
FOREIGN LANGUAGE			Fr 1					Ger 1	
HUMAN SERVICES	AJ 30	HeC 4	AJ 14 AJ 66 AJ 81	AJ 11 AJ 51	AJ 13 AJ 90 HS 50 HS 91 Rec 82	AJ 56 AJ 61 Eo 90			
LIFE SCIENCE							Bio 1 Bio 7 Btny 1	Zool 8	
MATH	Math 4	Math 18	Math B Math C Math 1A Math 2A Math 10A	Math 40	Math A Math 6	Math 3 Math 20			
PARAMEDICAL				ADN 1					
PERFORMING ARTS	Mus 7		Mus 24A TA 1	Mus 15A		Mus 6A Mus 9A Mus 12A			
PHYSICAL EDUCATION		PE 8A	PE 44	HEd 21					
PHYSICAL SCIENCE			Astr 1 Astr 9A Phys 4A	Phs 10 Phys 2A	Geol 3	Geol 2			
SOCIAL SCIENCE	Hist 20 MAS 41B	Hist 41B MAS 41A	PS 2	Hist 18 PS 1		Hist 4A Hist 15 Hist 17B Phil 3	Hist 17A Hist 8A	Phili 1 Hist 4B Hist 10A	
SPEECH		Spch 3		Spch 42		Spch 4 Spch 75			
TECHNOLOGY	CI 4 CI 6A	ATT 5	AS 10	Aero 2 Arch 50 Att 31B		Ag 8 Ag 34 Elec 2	CE 92		
VISUAL ARTS			ID 40	Art 5	Art 50B	Art 31 Art 8	Art 20 Art 50A		

To calculate grade level multiply the reading index by .06.

The average successful completion rate of students in courses with reading index below the index listed above was 29%.

The average successful completion rate of students in courses at or above the index level was 72%.

FINDINGS

1. Reading is a basic skill in the acquisition and demonstration of knowledge in the contemporary learning environment at Southwestern College.

2. The reading test used at Southwestern is generally valid as an instrument for the measurment of reading skill as it relates to performance at the college.

3. A significant proportion of students have a measured reading deficiency which interferes with successful academic performance at Southwestern.

4. A significant proportion of the curriculum requires some baseline reading level to insure at least minimal (50%) probability of successful completion.

5. Reading levels required for successful completion vary widely between the various courses, disciplines, and departments of the college.

RECOMMENDATIONS

1. That the reading test be required of students enrolling in reading related curriculum.

2. That the success probabilities associated with reading levels and curricular areas be clearly communicated to faculty, counsellors, and students so that informed decision making can be encouraged at all levels.

3. That consideration be given to some level of reading competency as prerequisite to enrolling in reading related areas of the curriculum.

4. That large scale methods for improving reading competency be considered.

5. That dialogue be opened with High School District personell to encourage cooperate efforts in sharing information and improving reading competency of students at both the High School and College levels.

6. That the language problems of bilingual students receive particular attention including methods for determining Spanish language competency levels etc.

7. That departments and individual faculty members become increasingly sensitive to reading and vocabulary development as thresholds to successful performance in curricular areas and alter existing curricula and/or design new curricula to meet these needs.

SOUTHWESTERN COLLEGE

MEMORANDUM

DATE: August 30, 1977

TO: Chester S. DeVore

FROM: Donald Singer and Saxon Wraith

SUBJECT: Course Reading Prerequisites: a possible response to the relationship between student reading ability and success in courses

I. Research indicates that a positive relationship exists between a student's reading competency and his/her chances of achieving academic success at Southwestern College. More specifically, it is apparent that in some courses (e.g. tennis) the ability to read has no discernable influence on the student's ability to learn, while in many other courses (e.g. biology and philosophy) the student's ability to read is essential to his/her survival. Additionally, in courses where reading does appear to be a critical learning tool, the level of reading competency that is needed seems to vary widely from course to course.

We believe that this information can and should be used to improve the learning/teaching efforts of the College. This could be done, perhaps, in many ways. We are suggesting that a course prerequisite system be considered as one of the most effective options for stimulating student growth and success, and for assuring both the integrity and adequacy of the curriculum. Moreover, the use of course prerequisites is a direct, clearly understood, and already accepted part of the College's long standing efforts to assure that students possess at least the minimum beginning competencies required for a course before they enroll in it.

This proposal is offered with the hope that it may stimulate and assist a broad cross-section of the college community (students, staff, and Board) to explore again in depth the meaning and dimensions of success - success for students, success for teachers, and success for a college.

II. It is proposed that a Course Reading Index Prerequisite System be instituted at Southwestern College. The system would incorporate the following features.

A. Those courses in which student success is deemed to be "reading - related at a survival level", would be open for enrollment only to students who can read well enough to have at least a 50% chance of surviving.

1. "Reading related at a survival level" means more than just that the student's grade may be influenced by how well he/she reads. It means that a specific reading level can be identified for that course whereat: a) if a student's reading skills are below that level, then the student has less than a 50% chance of success (success = completing the course with a grade of C or better); while b) if a student's reading skills are at or above that level, then the student does have a 50% or greater chance of success.

2. For each such course, the reading level necessary to provide at least a 50% chance for success in that course would be identified. This particular level of reading competency (Reading Index) would be established as a prerequisite for the course.

3. Students would then be admitted to the course only if they could read at the required level.

B. In those courses effected, the particular Reading Index for each course would be included in the College Catalog course description just as other prerequisites are currently shown.

C. The Reading Index prerequisites would be printed for each such course in the Schedule of Classes each term, and enrollment in courses would be controlled at registration.

D. Students would be able to establish their own current reading level (index) by completing a 30 minute standardized test. They could do this before enrolling at the College. Subsequently they could reestablish their index each semester if they wished to demonstrate that they had improved their reading skills and were now prepared to enroll in courses which had higher Reading Index prerequisites.

WSW:kg

SOUTHWESTERN COLLEGE
RESEARCH REPORT

September 2, 1977 77-9

IMPLICATIONS OF THE PROPOSED COURSE READING INDEX PREREQUISITE SYSTEM

Allan MacDougall
Dean of Research, Development, and Data Processing

September 1977

IMPLICATIONS OF THE PROPOSED COURSE READING INDEX PREREQUISITE SYSTEM

If the proposed Course Reading Index Prerequisite System was to be implemented in its present form, the following results would be likely to occur:

1. More students would be required to take the reading test.
2. The class "W" rate would be reduced from 24% to 19%.
3. The average rate of student successful completion in "reading related" subject areas would increase from 62% to 72%.
4. Students with limited reading skills would be more successful in their overall classroom performance by being precluded from enrolling in courses with a high probability of failure.
5. The class selection options would be more limited for students of low measured reading skill. The following table shows the number of courses open to the student based on his reading skill.

Reading Level	Percent of Students	Courses Open to Students	Courses Closed to Students
Below 117	6%	183	135
Below 150	16%	202	116
Below 183	31%	249	69
Below 217	50%	294	24
Below 234	68%	311	7

6. Students interested in taking courses with higher reading indexes would have some motivation to improve reading scores so they could enroll in the desired course.
7. The developmental reading courses would have higher enrollments and increased pressure to assist the student in improving his Nelson-Denny reading score.
8. There will be enrollment shifts away from strongly "reading related" areas such as Behavioral Sciences, Business, Life Science, Social Science, etc. Many of these class enrollments would shift to "non-reading related" subject areas such as P.E., Visual Arts, Spanish, and "non-reading related" vocational curricula.
9. If the proposal had been implemented in Fall 1976, it would have directly affected 2398 course enrollments or 6% of the total class enrollments. If the reading abilities and performance of those not taking the Nelson-Denny test were assumed to be equivalent to those taking the test, the proposal would affect potentially 4997 class enrollments or 14% of the total class enrollments.
10. If one-third of the precluded enrollments did not move to another course to replace the one not allowed due to reading deficiency, the possible net loss would be between 100-200 ADA* in the first year. This loss would be progressively cut in succeeding years through higher second Census Date retention rates. If all class enrollments which were precluded because of reading deficiency were replaced by enrollment in a "non-reading related" area, there would be a net gain of approximately 100 annual ADA due to second census retention.

*Calculated for one year and takes into account a reduction in second census drop rate due to a higher retention of students with low reading scores.

11. The proposal would effect students regardless of ethnic group. However, a larger proportion of minority students would be affected as shown below.

	Day Students Reading Below 13th Grade Level		% Of Ethnic Group Below This Level	Day Students Reading Below 10th Grade Level		% Of Ethnic Group Below This Level
	Number	Percent		Number	Percent	
Mexican-American	702	34%	48%	389	41%	28%
Anglo	797	39%	20%	276	29%	6%
Black	142	7%	43%	67	7%	22%
Philipino	158	8%	49%	69	7%	21%

AM:kg

COUNSELING MATERIALS

COUNSELING BASED ON SUCCESS PROBABILITIES

Priority Area of Concern	Problem	Action/Recommendation	Consequences
1. FINANCES # 7 On back of new student application	If a student lists a family income of less than $7500 (Codes 1, 2, or 3)	He/she can probably qualify for financial aid. If they have not applied encourage them to do so.	If the student does not get Financial Aid he has a 52% probability of becoming a dropout this semester. If he receives Financial Aid his dropout probability is 10%.
2. JOB # 3 On back of new student application	If day student lists code # 3 (not employed and seeking work) If a day student says he is employed full time (employment code #1) and plans to take 3 or more courses (see # of courses # 10)	Refer to Placement Center Recommend taking fewer courses, or cutting back on the hours he works.	If he gets a part-time job his probability of dropping out is lowered by 7%. If he cuts back on either school or work he can cut his dropout potential between 13% and 20%
3. GOALS #13 On back of new student application	Undecided, self improvement, and job advancement declared majors have relatively high dropout probability particularly in certain subject areas.	If undecided recommend appropriate PD courses. Recommend the selection of courses in subject areas where the student has lower dropout probabilities and a successful completion rate of at least 50%.	See green sheet for dropout and successful completion probabilities.
4. BASIC SKILLS (Reading) See Nelson Denny composite raw score.	Students have different probabilities of success in different subject areas and courses based on reading competency.	Recommend the selection of courses and subject areas where a student has at least a 50% probability of success.	See gold and yellow sheets.

DAY STUDENTS

DROPOUT PROBABILITIES
BASED ON STUDENT OBJECTIVES

DECLARED MAJOR	APPLICANT	REGISTRANT	STUDENT
Transfer Major (200-299)	35%	24%	14%
Vocational Major (100-199)	36%	25%	16%
Undecided Major (001)	48%	32%	25%
Self Improvement (002)	54%	40%	33%
Job Advancement (003)	58%	45%	34%

DAY STUDENT

DECLARED MAJOR SUBJECT MATTER

COUNSELING MATRIX

SUBJECT AREAS WHERE SPECIFIC MAJORS HAVE LESS THAN 50% CHANCE OF SUCCESSFULLY COMPLETING

TRANSFER (200-299)	VOCATIONAL (100-199)	UNDECIDED (001)	SELF-IMPROVEMENT (002)	JOB ADVANCEMENT (003)
Biology (47)	Biology (41)	Anthropology (49)	Admin of Justice (11)	Admin of Justice (40)
Botany (34)	Black Studies (27)	Architecture (44)	Agriculture (46)	Agriculture (44)
	Botany (23)	Biology (40)	Airline Services (40)	Art (16)
	Geology (38)	Botany (27)	Astronomy (47)	Automotices (46)
	German (33)	Child Dev. (48)	Botany * (25)	Biology (31)
	Journalism (43)	Coop Ed (35)	Bus Admin (36)	Black Studies (34)
	Philosophy (35)	Data Proces (42)	Chemistry (16)	Business Admin (38)
	Theater Arts (45)	English (49)	Economics (40)	Chemistry (20)
		German * (33)	Home Econ (47)	Coop Ed (40)
		Journalism (32)	History (45)	Construction Tech (40)
		Nurses Aide * (40)	Italian * (33)	Data Proces (33)
		Philosophy (45)	LVN (33)	English (43)
		Political Sci (45)	Music (39)	Health Ed (47)
		Recreation (48)	Psychology (44)	Journalism * (33)
		Zoology (29)	Secretarial Sci (39)	Mexican American Studies (28)
				Music (40)
				Recreation (46)
				Sociology (10)
				Theater Arts (33)
				Secretarial Sci (47)

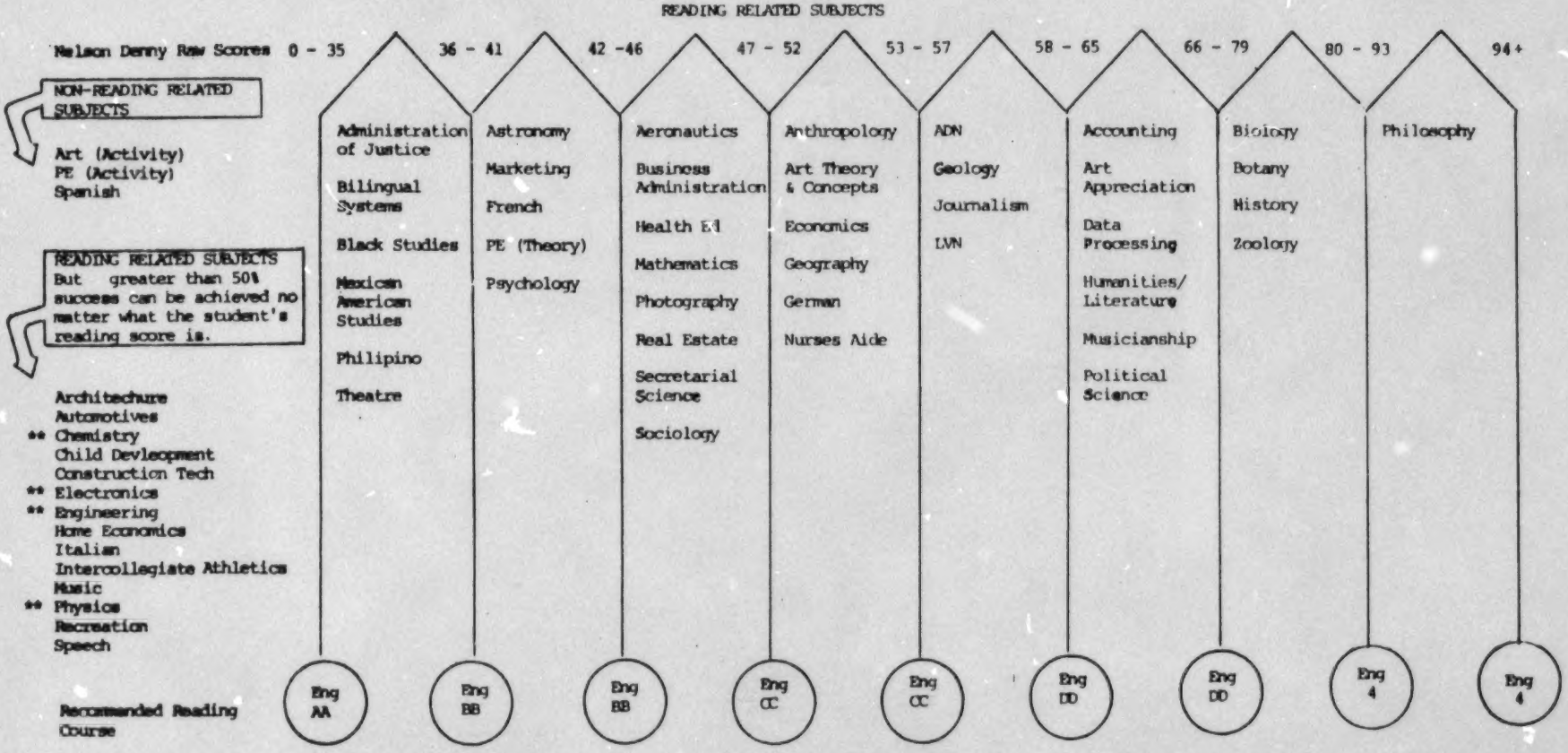
Numbers in parentheses are the probability of successfully completing courses in the subject area.

* 5 or less students enrolled with this major

READING SCORE/SUBJECT SELECTION

COUNSELING MATRIX

1. Find the student's Nelson Denny reading raw score.
2. Find the vertical line below the range which contains the score.
3. The student will have less than a 50% probability of successfully completing subject areas to the right of his/her vertical line—he/she will have at least a 50% chance of successfully completing subjects to the left of the line.
4. Follow the line to the bottom of the page to find the recommended reading course.



* For specific courses within the subject areas see the course selection counseling matrex (the yellow form).
** Caution should be exercised in arbitrarily placing students with low reading scores in these subject areas.

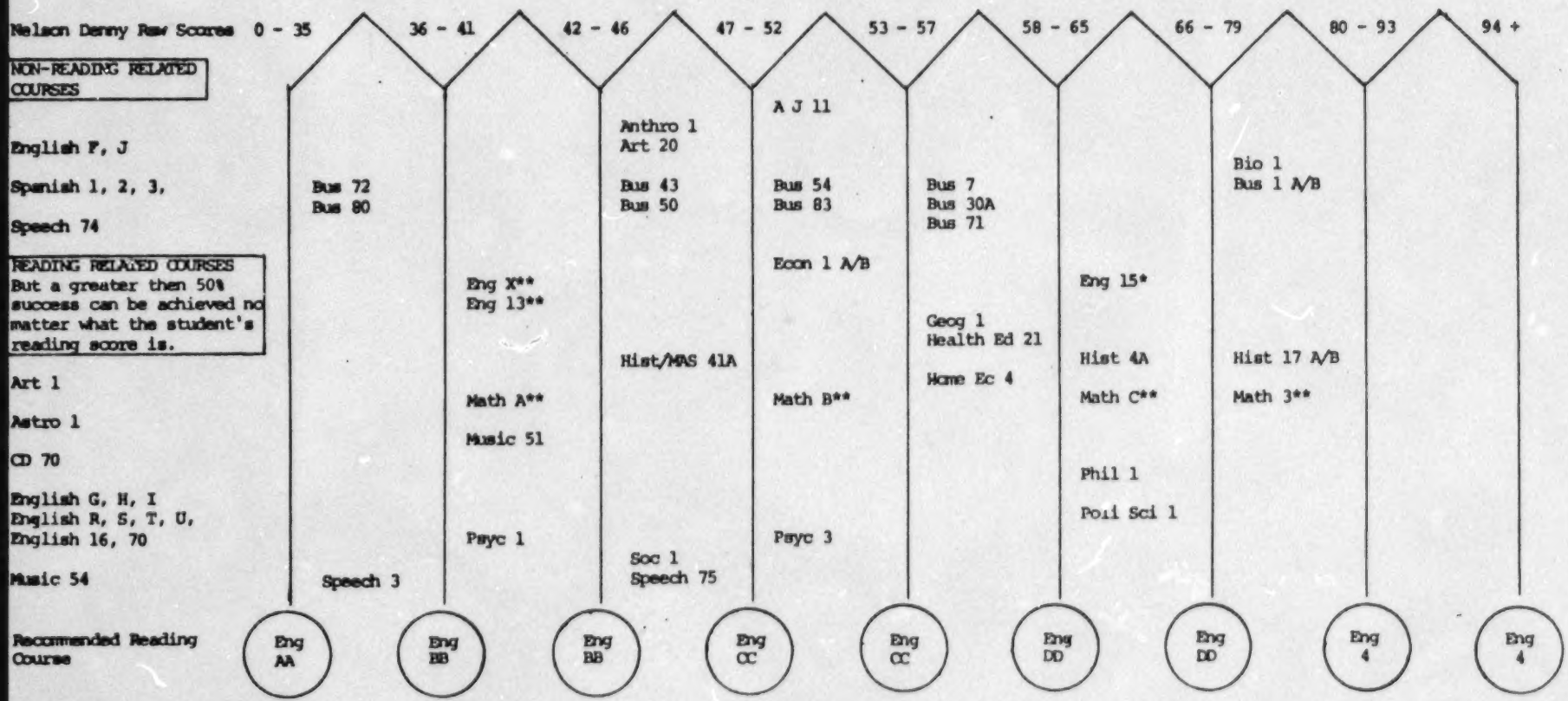
READING SCORE/COURSE SELECTION

COUNSELING MATRIX

FOR THE 50 COURSES WITH THE HIGHEST ENROLLMENT

1. Find the student's Nelson Denny reading raw score.
2. Find the vertical line below the range which contains the score.
3. The student will have less than a 50% probability of successfully completing course to the right of his/her vertical line--he/she will have at least a 50% chance of successfully completing courses to the left of the line.
4. Follow the line to the bottom of the page to find the recommended reading course.

READING RELATED SUBJECTS



* Also see CEPT for placement
** Also see Math placement scores for placement

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Research Office

Southwestern College

PREDICTABILITY COUNSELING - FALL 1979

Three years ago a comprehensive study of the relationship between reading and performance in the curriculum was performed. That study has been subsequently updated each Fall semester. The central finding of this study was that students with reading deficiencies had difficulty in performing in a large portion of the curriculum at Southwestern. In Spring 1979, under the direction of the Vice-President of Student Services and with the cooperation of the Research Office and the Counseling Center, predictability counseling was partially implemented. In the Fall 1979, a more complete implementation of predictability counseling was completed.

In the Fall 1979, all new students indicating that they would be taking six units or more were tested with the Nelson-Denny Reading Test. 382 Students who scored below the 10th grade reading level were counseled in a mandatory counseling appointment. In this appointment, students were given information showing the classes where less than 50% of the previous students with less than 10th grade reading scores had successfully completed the course. These students were encouraged to take Developmental Reading classes and other courses where their probability of success was greater than 50%.

Table I shows the comparison performance between the 382 low reading students who received predictability counseling and 207 low reading students who for some reason or other did not receive predictability counseling in the same semester. Every measure of comparative performance shows the predictability counseled students to be significantly more successful than students who did not receive such counseling. A much greater percentage of students completed at least one class and completed classes successfully. A much smaller percentage of predictability counseled students dropped out, went on probation, or failed to complete at least half of their classes. These differences are statistically significant.

Another dramatic difference between the predictability counseled students and those who were not was in their matriculation patterns. The result of improved matriculation for the predictability counseled students netted approximately $80,000 in increased apportionment revenues than would have been realized if these students had not received predictability counseling. A higher return rate of the predictability counseled students in the Spring semester would add even more apportionment revenues to the District.

In summary, it can be concluded that predictability counseling produces significant increases in matriculation and positive performance for those students who would otherwise have difficulty in their first semester at the college. Further research into second semester persistence and the effect of Developmental Reading courses on subsequent performance should be performed.

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TABLE I

ANALYSIS OF PREDICTABILITY COUNSELING

FALL 1979

	New Students Pred. Coun. With Less Than 10.0 Nelson-Denny Score	New Students Not Coun. With Less Than 10.0 Nelson-Denny Score	All Students
A) Status			
Total Applicants	382	207	
Registered Students	351 (92%)*	140 (68%)*	
1st Census Students	342 (90%)*	124 (60%)*	11,593
Avg. 1st Census Units	11.6	8.9	8.6
% Day Students	90%	81%	57%
% Minority	71%	68%	42%
% Foreign	26%	19%	3%
Avg. Reading Grade Level*	7.4	7.2	11.7
B) Performance**			
% Completing at Least One Class	85%	68%	75%
% Dropouts	9%	24%	18%
% On Probation (Greater Than 6.0 Units)	40%	47%	33%
Avg. GPA (Including Dropouts)	2.09	1.63	2.11
Avg. GPA (Not Including Dropouts)	2.57	2.50	3.07
Avg. % of Successful Class Completions	67%	51%	65%
% Completing Less Than Half of Their Classes	29%	47%	32%
C) Student Service & Instructional Support*			
% Requesting Counseling:			
Transfer	21%	16%	17%
Career	53%	42%	29%
Personal	30%	22%	12%
% Requesting Tutoring:	23%	19%	9%
% Anticipating Problems:			
Language	35%	23%	10%
Learning	5%	4%	2%

*Percent of applicants.
**Based on 1st Census Enrolled Students.

% Taking Developmental Reading	19%	8%	2%
% Taking ESL	22%	18%	4%
% Taking English Mini's	16%	6%	4%
% Taking Personal Development Classes	6%	2%	2%
% Going to Tutoring	24%	8%	10%

D) ADA Revenue Increase Impact of Predictability Counseling for Fall 1979 only. + $80,463

Potential Additional Increase of ADA Revenue for Predictability Counseling - Fall 1979 only. + $43,374

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3/5/80

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Los Angeles, California 90024

JUN 17 1983